

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Cancelled)

2. (Currently Amended) A substrate processing apparatus, ~~as set forth in claim 1, further comprising:~~

a process chamber in which a substrate is plasma-processed;

a gas introducing mechanism configured to introduce gas into the process chamber;

a holding mechanism having a surface provided in [[said]] the process chamber and configured to horizontally hold the substrate on the surface[[,]];

a first exhaust mechanism having a first exhaust port positioned higher than a surface of the substrate on the holding mechanism in the process chamber, and configured to exhaust an inside of the process chamber when a gas for plasma processing is introduced into the process chamber by the gas introducing mechanism to plasma-process the substrate; and

a second exhaust mechanism having a second exhaust port positioned lower than the holding mechanism in the process chamber, and configured to exhaust the inside of the process chamber when a gas for cleaning is introduced into the process chamber by the gas introducing mechanism to clean the inside of the process chamber.

~~wherein the first exhaust port is positioned higher than said surface of the holding mechanism, and~~

~~wherein the second exhaust port is positioned lower than said holding mechanism.~~

3. (Currently Amended) [[A]] The substrate processing apparatus as set forth in claim 2, further comprising:

a hoisting/lowering mechanism configured to move [[said]] the holding mechanism upward when the substrate is plasma-processed, and move [[said]] a support mechanism downward when the inside of [[said]] the chamber is cleaned,
wherein the first exhaust port is positioned higher than [[said]] the surface of the substrate on [[of]] the holding mechanism that has been moved up by [[said]] the hoisting/lowering mechanism, and

wherein the second exhaust port is positioned lower than [[said]] the holding mechanism that has been moved down by [[said]] the hoisting/lowering mechanism.

4-5. (Canceled)

6. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 2,

wherein [[said]] the first exhaust mechanism exhausts the inside of [[said]] the process chamber concurrently with the exhaust by [[said]] the second exhaust mechanism when the gas for cleaning is introduced into [[said]] the process chamber by [[said]] the gas introducing mechanism to clean the inside of the chamber.

7. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 2, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.

8. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 3,

wherein [[said]] the first exhaust mechanism exhausts the inside of [[said]] the process chamber concurrently with the exhaust by [[said]] the second exhaust mechanism when the gas for cleaning is introduced into [[said]] the process chamber by [[said]] the gas introducing mechanism to clean the inside of the chamber.

9. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 3, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.

10. (Canceled)

11. (Currently Amended) A substrate processing apparatus, comprising:

a process chamber in which a substrate is plasma-processed;

a gas introducing mechanism configured to introduce a gas for plasma processing and a gas for cleaning into [[said]] the process chamber;

a holding mechanism having a surface provided in [[said]] the process chamber and configured to horizontally hold the substrate on the surface;

a first exhaust mechanism having a first exhaust port positioned higher than [[said surface of]] a surface of the substrate on the holding mechanism in [[said]] the process chamber, and configured to exhaust the inside of [[said]] the process chamber; and

a second exhaust mechanism having a second exhaust port positioned lower than [[said]] the holding mechanism in [[said]] the process chamber, and configured to exhaust the inside of [[said]] the process chamber.

12. (Currently Amended) [[A]] The substrate processing apparatus as set forth in claim 11, further comprising:

a hoisting/lowering mechanism configured to move [[said]] the holding mechanism upward and downward,

wherein the first exhaust port is positioned higher than [[said]] the surface of the substrate on the holding mechanism that has been moved up by [[said]] the hoisting/lowering mechanism, and

wherein the second exhaust port is positioned lower than [[said]] the holding mechanism that has been moved down by [[said]] the hoisting/lowering mechanism.

13. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 11,

wherein [[said]] the first exhaust mechanism exhausts the inside of [[said]] the process chamber concurrently with the exhaust by [[said]] the second exhaust mechanism when the gas for cleaning is introduced into [[said]] the process chamber by [[said]] the gas introducing mechanism to clean the inside of the chamber.

14. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 11, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.

15. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 12,

wherein [[said]] the first exhaust mechanism exhausts the inside of [[said]] the process chamber concurrently with the exhaust by [[said]] the second exhaust mechanism when the gas for cleaning is introduced into [[said]] the process chamber by [[said]] the gas introducing mechanism to clean the inside of the chamber.

16. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 12, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.

17. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 13, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.

18. (Currently amended) [[A]] The substrate processing apparatus as set forth in claim 15, further comprising:

a microwave generator configured to generate a microwave for plasma processing of the substrate,

wherein a reactive gas is used as the gas for cleaning, and

wherein [[said]] the microwave generator generates the microwave also when the inside of [[said]] the process chamber is cleaned.